

## **Computer/PLC Based Furnace Controls**

Controlling heat with the aid of a touch screen computer

ESA-EPE furnace controls are now being designed using Allen Bradley RSView HMI software. The new controls are coupled with PLCs that monitor and control the furnace based on the manual or automatic settings downloaded from the operator's touch screen computer.

The control uses an industrially hardened Touch Screen Pentium PC to convey information to the



Members of the Induction Heating project, who are part of the Process Controls Team at EPE. Left to right: Caroll George, Joe Roybal, Vincent Kutac, James Jurney, and Steve Brandenburg.

operator. The operator PC also provides process control, data acquisition, and archiving.

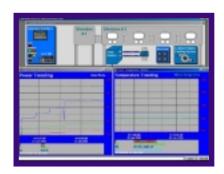
The system will have both manual and automatic (PID) power control. Process recipes can also be used to enhance consistency of furnace operations.

The operator panel contains diagnostic information to aid

in finding problems with the furnace system. Documents such as electrical and mechanical drawings can be accessed from the PC.

All interlocks, capacitor banks, and other ancillary equipment can be monitored and controlled from the operator panel. The control is capable of paging, or e-mailing a responsible party for specific problems. All problems can be logged in an alarm summary based on priority.

All units have Ethernet capability for networking as required.



Multiple windows showing process trends, and a system overview.



Sample furnace control window with digital and analog readouts, as well as trending and data logging of the process.



Alarm summary window which shows active, inactive, and acknowledged conditions.

## **Ballet Folklorico** —

Colorful as a tropical bird and rich in the history and culture of the Southwest.



Robert's constant companion at home, Sunshine, a blue macaw.

**Ballet Folklorico encompasses** 

the traditional dances from the

**Hispanic and Mexican** 

cultures. The traditional

Arabia, Spain, France and

dances with influences from

Germany, date back as far as

the Spaniards first arrival in

the Americas. Originally, the

dances were part of religious

community gatherings. The

costumes are as unique as

themselves are individual to

dance has its own costume.

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Robert Ortega has many interests outside of his work here at EPE. He is a skilled woodworker and mechanic, specializing in rebuilding vintage vehicles and Harley Davidsons. He also has an aviary with a variety of tropical birds, including a macaw, three parrots, and four conures. But Robert's most interesting hobby is the Ballet Folklorico.

About 15 years ago, Robert and his wife, Charolette Jaramillo, decided to take Ballet Folklorico lessons in Mexico. At the time, Charolette was a Spanish teacher in the McCurdy

schools and she was looking for new ways to teach the rich traditions and history of the Hispanic cultures. Ballet Folklorico caught both Robert and Charolette's interest. They threw themselves enthusiastically into learning the dances with the hopes of creating their own dance group at the McCurdy schools. With a lot of work and funding from the school itself, the Ballet Folklorico Los Compaños de McCurdy was born. Both Robert and

Charolette taught the group of high-school-aged students 2 to 3 evenings a week for nearly 12 years.

The Folklorico group does not meet formally anymore for lessons, but it continues to perform at

weddings, fiestas, private parties, and other special events. They have danced in cities ranging from southern Colorado to as far south as Roswell, New Mexico. The dance group meets to perform at least once a month. It currently has a

repertoire of 7 to 8 dances with origins in northern New Mexico and southern Colorado. Two of the dances are "La Indita" (The Little Indian Girl) and "La Cuna" (The Cradle).

All of the group's costumes are traditional. Robert and Charolette insist that everything from the headdresses to the shoes must be authentic. Each dance is unique to a



Robert and his wife, Charlotte Jaramillo, pose in traditional ballet folklorico costume from the Veracruz Jarocho region.

region or state in Mexico, Central America, or South America, and each has a specific costume with a significant meaning. Many of the approximately 1000 costumes that Robert owns and keeps for the group are meticulously handmade.

Currently, Charolette works with elementary-age children, teaching them the traditional dances three times a week. Robert occasionally pops in to help the boys with their steps. Both Robert and Charolette hope to have the dance group meet formally again in the near future, but until then they will continue to dance for special occasions. meetings and important community gatherings. The costumes are as unique as each dance. The dances themselves are individual to specific regions, and each dance has its own costume.



Above: Ballet Folklorico Los Campaños de McCurdy. Left: Robert performs the typical dances of Jalisco, Mexico with his wife (in yellow) and others.

# **Favorite Holiday Recipes**

Pine Cone Cheese Ball

Margaret White

1 8-oz. pkg cream cheese, softened

1/2 cup mayonnaise

5 slices bacon, crisp - crumbled

1 Tbsp. chopped green onion

1/2 tsp. dill weed

1/8 tsp. pepper

1 1/4 cup toasted almonds

Combine cream cheese and mayo well. Add bacon, onion, dill weed, and pepper. Mix well. Chill at least 2 and up to 24 hours. Form into pine cone shape. Cover will almonds, starting at the bottom. Serve with crackers. Can decorate with artificial pine sprigs at the top.



8 Hard-boiled eggs

1/4 cup melted butter

1/2 tsp. worcheshire sauce

1/4 tsp. mustard

1 Tbsp. minced parsley

1 Tbsp. onion

1 cup grated American cheese

1/2 cup ham (optional)

#### Sauce:

3 Tbsp. butter, melted

1/4 cup flour

1 bouillon cube

1 cup boiling water

3/4 cup light cream

salt, pepper, paprika

Cut eggs lengthwise and remove yolks. Combine yolks with butter, wor. sauce, and mustard. Add onion to mixture and ham if desired. Sprinkle parsley on bottom of pan. Stuff eggs with mixture and place on parsley bed in pan. Sprinkle with parsley on top.

Sauce: Blend butter with flour. Dissolve cube in boiling water and gradually add to butter mixture, stirring constantly. Cook over med. heat until thickened. Add cream and cook until smooth. Pour mixture over eggs. Sprinkle with grated cheese over the top. Bake at 350°F for 20 minutes.

Chocolate Desser

Karen Brewer

1 cup flour

1 cube butter

1 cup chopped nuts

1 8-oz. pkg cream cheese, room temperature

Large container of Cool Whip

1 sm. pkg. chocolate pudding mix (not instant)

1 sm. pkg. vanilla pudding mix (not instant)

3 cups milk

Chocolate bar

Mix together flour, butter, and 1/2 cup of the nuts. Press into bottom of baking dish. Bake at 350°F for 20 min. Set aside to cool.

Whip cream cheese and fold in 1/2 of the whip cream and spread over cooled crust.

Cook chocolate pudding and vanilla pudding in 3 cups milk. Cool and spread over cheese layer. Spread the rest of the whip cream over the pudding layer and top with grated chocolate and leftover nuts. Chill.





Lisa Lindberg

2 cups cooked turkey breast, cubed

1 small head of lettuce, torn into pieces

1 large red apple, cut into 1/2 in. pieces

1/4 cup raisins

2 Tbsp. walnuts, coarsely chopped

1 cup jellied cranberry sauce

1/4 cup orange juice concentrate

2 kiwi fruit, peeled and sliced

In medium bowl combine turkey, apple pieces, raisins and walnuts. In small bowl, mix cranberry sauce and orange juice concentrate. Set aside. Arrange lettuce leaves among four plates. Top with one cup salad mixture and garnish with 4-5 kiwi fruit slices. Serve dressing on the side.



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- Electronic equipment with a data exchange port capable of being connected to automatic information system equipment
- Radio frequency transmitting equipment
- Computers and associated media (including palm-top computers)

# **EPE takes 2nd in the Division Golf Tournament**



Len Stapf, Cliff Polston, Paul Wantuck, and Steve Limback and a mysterious stranger pose with their Trophy.

Congratulations go out to our distinguished EPE golf team for blazing the trail on the Los Alamos Golf Course this past September. The ESA Division Golf Tournament 2000 was played on September 28, 2000 with over 80 players. The EPE Golf Team was there to represent the Group in this muchanticipated event and came away with 2nd place net. The combination of Lenny's crushing drives, Paul's new golf clubs, Cliff's clinching putts and Steve's shear determination brought home the prize. Be sure to show your admiration for this stellar performance and look for ESPN sports new clips in the coming days.

# Holiday Safety for you . . .



Holidays present a variety of unique safety hazards. With a little forethought hazards can be avoided and everyone can have a safe and happy Holiday.

#### **FOOD: Golden Rules of Food Safety**

- Always wash your hands before and after handling food. And wash your hands between each task.
- Always serve food on clean plate. Never reuse the plate used for the raw meat for the cooked meat (unless you have washed the plate in between).
- Keep hot food hot and cold food cold. Do not leave foods at room temperature for longer than 2 hours
- If in doubt, throw it out.

#### FIREPLACES

- Before starting a fire, make sure you remove all decoration from the area.
- Be sure the flu is open.
- Do not burn wrappings or evergreen bows; these can burn extremely fast and throw off sparks and burning debris.

#### **CHRISTMAS TREES**

- If you use an artificial trees make sure it has the UL label attached.
- When purchasing a live tree, check for freshness. Just because it is green does not mean it is fresh. Needles are difficult to pull from the branches on a fresh tree and when bent between your fingers, needles do not break. The trunk butt of a fresh tree is sticky with resin.
- When setting up a tree at home, place it away from fireplaces and radiators.
- Avoid placing small or breakable ornaments on lower branches where small children or pets can reach them or knock them off.
- Tinsel should not be used in homes with pets and small children. The tinsel can choke a child or pet if swallowed.
- Be aware of toxic decorations. Mistletoe and holly berries are poisonous. Old tinsel may contain lead.

November							
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
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Sun	Mon	Tue	Wed	Thu	Fri	Sat	
December							
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Nov 7	Group Meetina –	– MSI	Auditoriun

Nov 10 Veteran's Day Holdiay

Nov 23-24 Thanksgiving Holiday

Dec 5 Group Meeting — MSL Auditorium

Dec 25-26 Christmas Holiday

Dec 27-29 LANL Closure

### **LA Awards**

#### Pete Pittman

Nominated by Torsten Staab for his excellent performance on the ARIES Lathe automation project.

#### Karen Brewer

Nominated by Paul Wantuck for her outstanding efforts on the Hazard Control Plans.

#### Joe Roybal

Nominated by Steve Brandenburg for his outstanding work at TA-55 on furnace upgrades.

#### Margaret White

Nominated by Karen Brewer for excellent work as the acting Group Office Administrator.



**ESA-EPE Group Office:** Paul Wantuck, Group Leader; Gary Read, Deputy Group Leader; Margaret White, Acting Group Office Administrator; Lisa Lindberg, Writer/Editor.

**EPE News, Early Winter 2000, Vol. 1, No.2.** EPE News is published bimonthly by the ESA-EPE Group Office, MS J576, Los Alamos National Laboratory, Los Alamos NM 87545.

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